SUMMARY OF HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN

July 2003

Prepared by the Office of the Delaware River Master Milford, Pennsylvania

Adjusted streamflow in the upper Delaware River Basin during July was excessive. The maximum daily mean discharge of 5,610 cfs occurred on July 1. The minimum daily mean discharge was 1,990 cfs on July 20.

The observed monthly mean streamflow of the Delaware River at Montague, N.J. during July was 3,415 cfs, which is 142 percent of median. The flow at Montague, adjusted for diversions from the basin and change in storage in the major reservoirs was 3,395 cfs, or 152 percent of median (water years 1961-90).

On the basis of an 11-station average, precipitation during July was 3.95 inches, which is 98 percent of the 62-year average. The maximum daily-average precipitation during the month was 1.20 inches on July 22. Precipitation in the upper Delaware River Basin during the past 12 months was 5.50 inches more than the long-term average. Precipitation during July was 0.07 inches less than the long-term average for the month.

Combined storage August 1, 2003 in Pepacton, Cannonsville, and Neversink Reservoirs was 96 percent of capacity above the point of maximum depletion. The combined storage of 259 billion gallons was 12 billion gallons less than that of one month ago and 52 billion gallons more than that of one year ago. Median storage on the first day of August in 36 years of record is 230 billion gallons. Cannonsville Reservoir spilled 25 million gallons on July 1. Pepacton and Neversink Reservoirs did not spill at any time during July.

As part of a statewide network, the USGS operates 12 observation wells in the Pennsylvania part of the Delaware River Basin. Mean water levels during July were above average in 11 of the wells. Water levels in 7 of the wells were below June 2003 levels, and water levels in all of the wells were above July 2002 levels.

HYDROLOGIC CONDITIONS IN THE UPPER DELAWARE RIVER BASIN

Compiled by the Office of the Delaware River Master, Milford, Pa.

(Preliminary data - subject to revision)

PRECIPITATION, IN INCHES

	Dec. 1940 to July 2002		August 2002 to July 2003						
	Average		Actual		Percent of average		Excess (+) or deficit (-)		
	Amount	Cumulative	Amount	Cumulative	By month	Cumulative	By month	Cumulative	
Aug.	3.83	43.12	3.31	48.62	86	113	52	+5.50	
Sept.	3.86	39.29	5.40	45.31	140	115	+1.54	+6.02	
Oct.	3.35	35.43	6.30	39.91	188	113	+2.95	+4.48	
Nov.	3.79	32.08	3.96	33.61	104	105	+.17	+1.53	
Dec.	3.35	28.29	*4.66	29.65	139	105	+1.31	+1.36	
Jan.	2.98	24.94	2.38	24.99	80	100	60	+.05	
Feb.	2.63	21.96	2.59	22.61	98	103	04	+.65	
Mar.	3.36	19.33	3.00	20.02	89	104	36	+.69	
Apr.	3.74	15.97	2.63	17.02	70	107	-1.11	+1.05	
May	4.22	12.23	3.57	14.39	85	118	65	+2.16	
June	3.99	8.01	6.87	10.82	172	135	+2.88	+2.81	
July	4.02	4.02	3.95	3.95	98	98	07	07	

Note: Amount shown in cumulative columns is total from month shown to present.

<u>STREAMFLOW, IN CFS</u> DELAWARE RIVER AT MONTAGUE, N.J.

		1940-2001	2003	Percent of	
Month	Maximum	Median	Minimum	Monthly mean	median
July (observed)	11,220 (1945)	2,397	864 (1954)	3,415	142
July (adjusted)	11,470 (1945)	2,082	391 (1965)	3,395	163
August (observed)	14,230 (1955)	2,088	715 (1954)		
August (adjusted)	17,410 (1955)	1,341	364 (1964)		

^{*} Revised since last month.